April 15, 1958 W. F. PAWLOWSKI 2,830,332

ELEVATED SECTIONAL FLOORING

Filed Nov. 1, 1956

FIG. 1

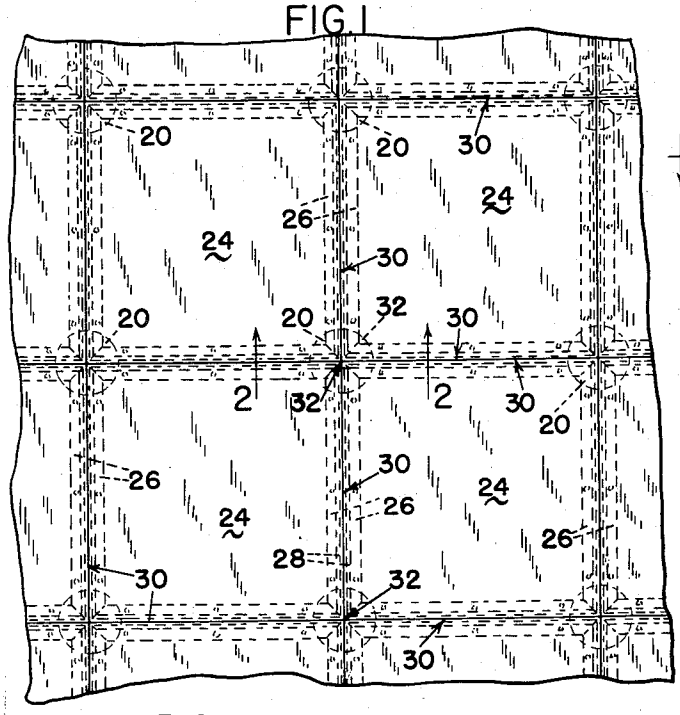


FIG. 2

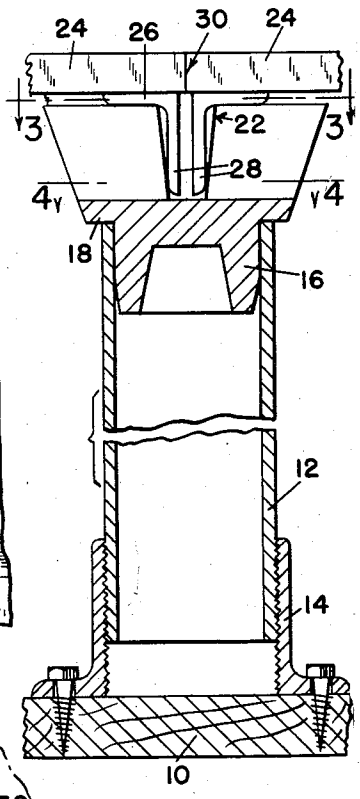


FIG. 3

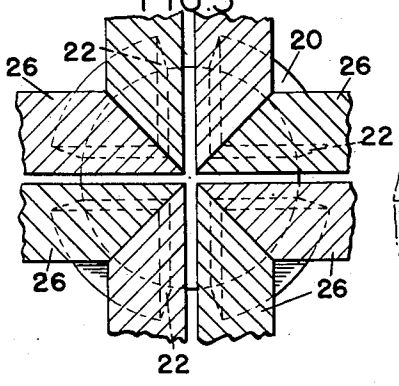


FIG. 4

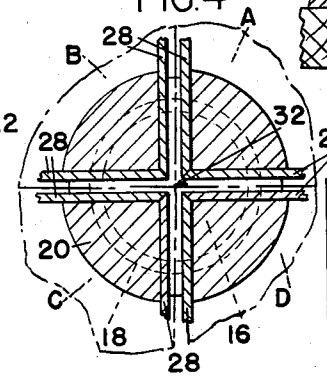


FIG. 6

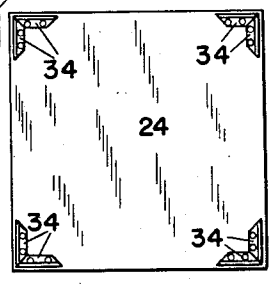
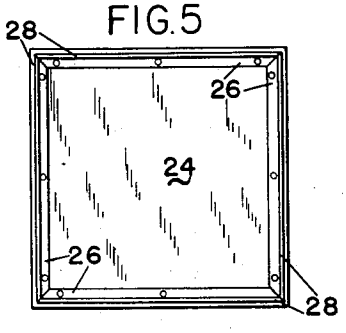


FIG. 5



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United States Patent Office 2,830,332 Patented Apr. 15, 1958

2,830,332

ELEVATED SECTIONAL FLOORING

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Application November 1, 1956, Serial No. 619,886

5 Claims. (Cl. 20—8)

This invention relates to a new and improved elevated sectional flooring, the sections of which may be easily removed, replaced, or repositioned.

The principal object of the invention resides in the provision of an elevated flooring which may be used in TV stations, electronic machine computer installations, etc. for more uniformly distributing concentrated weight loads upon the base floor so that greater weights may be safely utilized than would otherwise be possible and also to elevate the working area above the cables and power supply of the network and to conceal the same while at the same time dispensing with the hazards incident to the disposition of cables on the floor in exposed condition.

Further objects of the invention include the provision of an elevated sectional floor as above described for increased ease and economy of installation; improved alignment of the individual panels and the least possible weight commensurate with load carrying capacity; for easy removal of the individual sections and to allow reusing and re-locating the sections for ready accessibility to cables beneath the floor.

In addition, the present invention provides for a minimum of supporting structure interfering with installation of cables and air-conditioning and heating duct work, together with provision for such dimensions for the sections of the elevated flooring that holes required for bringing cables to equipment may be cut without weakening the floor or requiring modification of the supporting structure, and for rigidity of the completed floor such that individual sections cannot act independently or tend to tip, wobble, or become displaced.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which:

Fig. 1 is a plan view illustrating the sectional floor;

Fig. 2 is an enlarged section on line 2—2 of Fig. 1;

Figs. 3 and 4 are sections on the respective lines in Fig. 2;

Fig. 5 is a bottom plan view of one of the flooring sections; and

Fig. 6 is a view similar to Fig. 5 but showing a modification.

It is to be understood that the flooring comprising the present invention is mounted upon a base flooring which may be of any usual construction already in position and indicated by the reference numeral **10** in Fig. 2. At spaced intervals as required by the limitations of the manufacture of the flooring or of the installations provided for, there are mounted upon the floor **10** individual upstanding relatively short standards which may be tubular members such as for instance pipes **12**. These standards may have flanges thereon for securing the same to the floor and these flanges may be, as shown at **14** in Fig. 2, adjustable with respect to the tubes or pipes **12** so as to vary the vertical height thereof both for leveling

and for varying the height of the elevated floor above the base floor **10**.

If the sections of the elevated floor are to be square, then there will be a standard at the corner of each square and the standards will be arranged in a square pattern, but the floor sections may be of any other shape and particularly they may be rectangular and the standards would be arranged at the corners of the rectangles and in a rectangular rather than a square pattern.

The tubes or pipes **12** are open-ended and a fixture is applied at the upper end of each one, these fixtures being provided for quickly and easily anchoring the floor sections themselves. Each fixture may be generally circular in form and each is provided with a downwardly-extending terminal portion generally indicated at **16** which fits within the open end of the pipe as shown clearly in Fig. 2. This terminal portion extends into a wider portion forming an annular shoulder **18** resting upon the end of the tube or pipe **12**.

From the shoulder **18** the bracket extends upwardly preferably in conical form providing the main portion of the device indicated at **20**. The main portion of the fixture is provided with intersecting slots **22**, these slots being tapered converging downwardly in a wedge form.

Each floor section is indicated at **24** and each section is provided at its under side with a continuous angle-iron or the like **26**. Each angle-iron has a downwardly-extending flange **28** and these flanges are to be disposed within the tapered channels **22**.

The relationship of the flanges with respect to the channels is such that the floor parts **24** firmly abut as indicated at **30** when the flanges **28** are firmly wedged against the converging side walls of the channels.

It is pointed out that the axis of each pipe **12** coincides with a point where four panels come together as perhaps is most clear from Figs. 3 and 4. These panels are indicated in Fig. 4 as A, B, C and D and the edges of these four panels will abut consecutively about the center which is indicated at **32**. The flanges **28** do not necessarily abut each other but they are wedged into the channels **22**.

A modification of the flooring is shown in Fig. 6 where the angle-irons **26** may be replaced by short sections of angle-irons as at **34**, as it is not necessary in all cases to have the angle-irons extend the length of each side of the floor sections. However, where the angle-irons extend from one fixture to another, they considerably increase the rigidity and the strength of the floor without imparting a great additional weight thereto. In some cases where such rigidity and strength is not necessary, the less expensive and modified form of Fig. 6 may be utilized.

It will be clear that the standards are easily set up on an already existing floor **10** and then the sectional floor parts are quickly and easily placed upon these supports or standards as above explained in order to complete an entire elevated floor section. The cables and power lines resting on the floor **10** will be completely covered and out of the way, and any one or more floor sections may be removed for access to the cables, etc. or holes may be made in any floor section and then a complete floor section may be used as a replacement where the hole is no longer wanted or needed. A great variety of patterns may be obtained and arranged by the elevated floor of the present invention.

The greater the weight on the sections, the tighter the wedging action will be in the fixtures, but the angle-iron flanges are adapted to fully seat, and the section edges abut at **30** in no load condition.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details

herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. Elevated sectional flooring comprising a series of standards for application to a floor and a series of floor sections for disposition on the standards, each floor section having a series of corners for disposition adjacent corners of juxtaposed sections, means forming downwardly extending flanges adjacent each edge of each section, said flanges intersecting each other in sharp cornered relation, there being a standard for each set of said adjacent corners, and multiple means on each standard to engage the flanges of the sections at the corners disposed at the respective standard, said means including a wedge engaging in a sharp corner, each section having edges abutting the adjacent edges of the next sections.

2. The elevated sectional flooring of claim 1 wherein the wedge comprises a top open tapered channel arranged at the upper end of each standard.

3. The elevated sectional flooring of claim 1 wherein the wedge comprises crossed tapered channels.

4. Elevated sectional flooring comprising a series of standards for application to a floor and a series of floor sections for disposition on the standards, each floor section having a series of corners for disposition adjacent

corners of juxtaposed sections, there being a standard for each set of said adjacent corners, and inter-engaging means on the sections and standards to hold the sections on the standards in edge-abutted relation, said inter-engaging means comprising crossed, tapered channels at the top of each standard and flanges on the sections at the lower surfaces thereof, the flanges forming sharp corners at the intersections and being adapted to be wedged in the channels.

5. The standard of claim 4 including means to vertically adjust each standard relative to a sub floor on which it is mounted.

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